

## **REMARKS**

In response to the request from Examiner Davis, applicants submit herewith a replacement Computer Readable disk containing sequence listings that correspond to the paper copy submitted herewith. Applicants further submit a Statement of Identity attesting to the fact that no new matter has been added.

Applicants enclose herewith a copy of the PTO 1449 forms submitted by applicants to supplement Examiner Davis's file, per her request.

It should be noted that applicants have made no changes to any of the formal drawings in the present application when they were submitted on August 28, 2001.

### **Amendment of Claims**

Claim 29 has been amended according to the suggestion of Examiner Davis. New claim 36 recites a method to determine if a test substance affects the interaction between PS2 and calmyrin. Support for this claim can be found at page 35, of the specification wherein it is stated that cell death findings in the present specification imply that the binding of calmyrin to PS2 is related to the PS2 function in apoptosis. Further, it was found that coexpression of calmyrin and presenilin 2 in HeLa cell increased apoptosis, which is discussed at page 39 with results shown in Figures 39 and 40. However, applicants found that using the mutated calmyrin there was decreased apoptosis when it was contacted with PS2 as discussed at the bottom of page 39 and top of page 40. Thus, the mutated calmyrin of the present invention can be used to determine the efficacy of a test substance to determine if this test substance effects the interaction of PS2 and calmyrin as stated at page 14, line 15. Clearly, if the results found with a test substance are comparable to that of the mutated calmyrin of the present invention in reducing apoptosis then the test substance has value for reducing apoptosis. One skilled in the art can easily determine the specifics of a testing assay using cells such as HeLa cells. Thus, the present specification provides sufficient disclosure in combination with knowledge of those skilled in the art to practice the subject matter of claim 36.

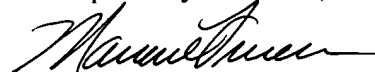
### **Fee Payable**

Applicants have added one additional independent claim but have cancelled 25 claims and as such, no fee is due for entry of this amendment. In the event a fee is found due, the U.S. Patent and Trademark Office is hereby authorized to charge any additional amount necessary to Deposit Account No. 08-3284 of Intellectual Property/Technology Law.

**Conclusion**

Applicants have satisfied the requirements for patentability. All pending claims are free of the art and fully comply with the requirements of 35 U.S.C. §112. It therefore is requested that Examiner Davis issue a Notice of Allowance. In the event that any issues remain, Examiner Davis is requested to contact the undersigned attorney at (919) 419-9350 to resolve it.

Respectfully submitted,



Marianne Fuierer  
Reg. No. 39,983  
Attorney for Applicants

**INTELLECTUAL PROPERTY/  
TECHNOLOGY LAW**  
**Phone: (919) 419-9350**  
**Fax: (919) 419-9354**  
**Attorney File No.: 4115-161**